

AMENDMENT NO. _____ Calendar No. _____

Purpose: To provide a renewable portfolio standard.

IN THE SENATE OF THE UNITED STATES—111th Cong., 1st Sess.

(no.) _____

(title) _____

Referred to the Committee on _____ and
ordered to be printed

Ordered to lie on the table and to be printed

AMENDMENT intended to be proposed by

Viz:

1 At the appropriate place, add the following:

2 **TITLE VIII—RENEWABLE**
3 **PORTFOLIO STANDARD**

4 **SEC. ____ 01. RENEWABLE PORTFOLIO STANDARD.**

5 (a) IN GENERAL.—Title VI of the Public Utility Reg-
6 ulatory Policies Act of 1978 (16 U.S.C. 2601 et seq.) is
7 amended by adding at the end the following:

8 **“SEC. 610. FEDERAL RENEWABLE PORTFOLIO STANDARD.**

9 **“(a) DEFINITIONS.—In this section:**

10 **“(1) BASE QUANTITY OF ELECTRICITY.—**

1 “(A) IN GENERAL.—The term ‘base quan-
2 tity of electricity’ means the total quantity of
3 electricity sold by an electric utility to electric
4 consumers in a calendar year.

5 “(B) EXCLUSIONS.—The term ‘base quan-
6 tity of electricity’ does not include—

7 “(i) electricity generated by a hydro-
8 electric facility (including a pumped stor-
9 age facility but excluding incremental hy-
10 dropower); or

11 “(ii) electricity generated through the
12 incineration of municipal solid waste.

13 “(2) DISTRIBUTED GENERATION FACILITY.—
14 The term ‘distributed generation facility’ means a
15 facility at a customer site.

16 “(3) EXISTING RENEWABLE ENERGY.—Except
17 as provided in paragraph (7)(B), the term ‘existing
18 renewable energy’ means electric energy generated
19 at a facility (including a distributed generation facil-
20 ity) placed in service prior to January 1, 2006, from
21 solar, wind, or geothermal energy, ocean energy, bio-
22 mass **[(as defined in section 203(b) of the Energy**
23 **Policy Act of 2005 (42 U.S.C. 15852(b))]**, or land-
24 fill gas.

1 “(4) GEOTHERMAL ENERGY.—The term ‘geo-
2 thermal energy’ means energy derived from a geo-
3 thermal deposit (within the meaning of section
4 613(e)(2) of the Internal Revenue Code of 1986).

5 “(5) INCREMENTAL GEOTHERMAL PRODUC-
6 TION.—

7 “(A) IN GENERAL.—The term ‘incremental
8 geothermal production’ means, for any year, the
9 excess of—

10 “(i) the total kilowatt hours of elec-
11 tricity produced from a facility (including a
12 distributed generation facility) using geo-
13 thermal energy; over

14 “(ii) the average number of kilowatt
15 hours produced annually at the facility for
16 5 of the previous 7 calendar years before
17 the date of enactment of this section after
18 eliminating the highest and the lowest kilo-
19 watt hour production years in that 7-year
20 period.

21 “(B) SPECIAL RULE.—A facility described
22 in subparagraph (A) that was placed in service
23 at least 7 years before the date of enactment of
24 this section shall, commencing with the year in
25 which that date of enactment occurs, reduce the

1 amount calculated under subparagraph (A)(ii)
2 each year, on a cumulative basis, by the average
3 percentage decrease in the annual kilowatt hour
4 production for the 7-year period described in
5 subparagraph (A)(ii) with such cumulative sum,
6 but not to exceed 30 percent.

7 “(6) INCREMENTAL HYDROPOWER.—

8 “(A) IN GENERAL.—The term ‘incremental
9 hydropower’ means additional energy generated
10 as a result of efficiency improvements or capac-
11 ity additions made on or after—

12 “(i) January 1, 2006; or

13 “(ii) the effective commencement date
14 of an existing applicable State renewable
15 portfolio standard program at a hydro-
16 electric facility that was placed in service
17 before that date.

18 “(B) EXCLUSION.—The term ‘incremental
19 hydropower’ does not include additional energy
20 generated as a result of operational changes not
21 directly associated with efficiency improvements
22 or capacity additions.

23 “(C) MEASUREMENT AND CERTIFI-
24 CATION.—Efficiency improvements and capacity

1 additions referred to in subparagraph (B) shall
2 be—

3 “(i) measured on the basis of the
4 same water flow information used to deter-
5 mine a historic average annual generation
6 baseline for the hydroelectric facility; and

7 “(ii) certified by the Secretary or the
8 Federal Energy Regulatory Commission.

9 “(7) NEW RENEWABLE ENERGY.—The term
10 ‘new renewable energy’ means—

11 “(A) electric energy generated at a facility
12 (including a distributed generation facility)
13 placed in service on or after January 1, 2006,
14 from—

15 “(i) solar, wind, or geothermal energy
16 or ocean energy;

17 “(ii) biomass **[(as defined in section**
18 **203(b) of the Energy Policy Act of 2005**
19 **(42 U.S.C. 15852(b))]**;

20 “(iii) landfill gas; or

21 “(iv) incremental hydropower; and

22 “(B) for electric energy generated at a fa-
23 cility (including a distributed generation facil-
24 ity) placed in service before January 1, 2006—

1 “(i) the additional energy above the
2 average generation during the period be-
3 ginning on January 1, 2004, and ending
4 on January 1, 2006, at the facility from—

5 “(I) solar or wind energy or
6 ocean energy;

7 “(II) biomass (as defined in sec-
8 tion 203(b) of the Energy Policy Act
9 of 2005 (42 U.S.C. 15852(b));

10 “(III) landfill gas; or

11 “(IV) incremental hydropower;

12 and

13 “(ii) incremental geothermal produc-
14 tion.

15 “(8) OCEAN ENERGY.—The term ‘ocean energy’
16 includes current, wave, tidal, and thermal energy.

17 “(9) QUALIFIED HYDROPOWER.—

18 “(A) IN GENERAL.—The term ‘qualified
19 hydropower’ means—

20 “(i) incremental hydropower; and

21 “(ii) additions of capacity made on or
22 after January 1, 2006, or the effective
23 commencement date of an existing applica-
24 ble State renewable portfolio standard pro-

1 that would have occurred in the ab-
2 sence of the hydroelectric project is
3 maintained, subject to any license re-
4 quirements imposed under applicable
5 law that change the water surface ele-
6 vation for the purpose of improving
7 the environmental quality of the af-
8 fected waterway, as certified by the
9 Federal Energy Regulatory Commis-
10 sion.

11 “(B) STANDARDS.—Nothing in this para-
12 graph or the application of this paragraph shall
13 affect the standards under which the Federal
14 Energy Regulatory Commission issues licenses
15 for and regulates hydropower projects under
16 part I of the Federal Power Act (16 U.S.C.
17 791a et seq.).

18 “(b) RENEWABLE ENERGY AND ENERGY EFFI-
19 CIENCY REQUIREMENT.—

20 “(1) REQUIREMENT.—

21 “(A) IN GENERAL.—Subject to subpara-
22 graph (B), each electric utility that sells elec-
23 tricity to electric consumers shall obtain a per-
24 centage of the base quantity of electricity the
25 electric utility sells to electric consumers in any

1 calendar year from new renewable energy, exist-
2 ing renewable energy, or energy efficiency.

3 “(B) PERCENTAGE.—Except as provided
4 in section 611, the percentage obtained in a cal-
5 endar year under subparagraph (A) shall not be
6 less than the amount specified in the following
7 table:

“Calendar year:	Minimum annual percentage:
2011 through 2012	4.0
2013 through 2015	8.0
2016 through 2018	12.0
2019 through 2020	16.0
2021 through 2039	20.0

1 “(2) MEANS OF COMPLIANCE.—An electric util-
2 ity shall meet the requirements of paragraph (1)
3 by—

4 “(A) submitting to the Secretary renewable
5 energy credits issued under subsection (c);

6 “(B) submitting Federal energy efficiency
7 credits issued under subsection (j), except that
8 those credits may not be used to meet more
9 than 25 percent of the requirements under
10 paragraph (1) in any calendar year;

11 “(C) making alternative compliance pay-
12 ments to the Secretary at the rate of 3 cents
13 per kilowatt hour (as adjusted for inflation
14 under subsection (h)); or

15 “(D) a combination of activities described
16 in subparagraphs (A), (B), and (C).

17 “(3) PHASE-IN.—The Secretary shall prescribe,
18 by regulation, a reasonable phase-in of the require-
19 ments of paragraph (1) as the requirements apply to
20 an electric utility that becomes subject to this sec-
21 tion after **【January 1/December 21?】**, 2013.

1 “(c) FEDERAL RENEWABLE ENERGY AND ENERGY
2 EFFICIENCY CREDIT TRADING PROGRAMS.—

3 “(1) IN GENERAL.—Not later than January 1,
4 2010, the Secretary shall establish a Federal renew-
5 able energy credit trading program, and a Federal
6 energy efficiency credit trading program, under
7 which electric utilities shall submit to the Secretary
8 Federal renewable energy credits and Federal energy
9 efficiency credits to certify the compliance of the
10 electric utilities with subsection (b)(1).

11 “(2) ADMINISTRATION.—As part of the pro-
12 gram, the Secretary shall—

13 “(A) issue tradeable renewable energy
14 credits to generators of electric energy from
15 new renewable energy;

16 “(B) issue nontradeable renewable energy
17 credits to generators of electric energy from ex-
18 isting renewable energy;

19 “(C) issue renewable energy credits to elec-
20 tric utilities associated with State renewable
21 portfolio standard compliance mechanisms pur-
22 suant to subsection (i);

23 “(D) issue energy efficiency credits pursu-
24 ant to subsection (j);

1 “(E) subject to subparagraph (F), ensure
2 that a kilowatt hour, including the associated
3 renewable energy credit or energy efficiency
4 credit, shall be used only once for purposes of
5 compliance with this Act;

6 “(F) allow double credits for generation
7 from facilities on Indian land, and triple credits
8 for generation from small renewable distributed
9 generators (meaning those no larger than 1
10 megawatt), except that no distributed renewable
11 generation facilities on Indian land shall receive
12 a greater number of credits than triple credits;
13 and

14 “(G) ensure that, with respect to a pur-
15 chaser that, as of the date of enactment of this
16 section, has a purchase agreement from a re-
17 newable energy facility placed in service before
18 that date, the credit associated with the genera-
19 tion of renewable energy under the contract is
20 issued to the purchaser of the electric energy to
21 the extent that the contract does not already
22 provide for the allocation of the Federal credit.

23 “(3) DURATION.—A credit described in sub-
24 paragraph (A), (B), (C), or (D) of paragraph (2)
25 may only be used for compliance with this section

1 during the 3-year period beginning on the date of
2 issuance of the credit.

3 “(4) TRANSFERS.—An electric utility that holds
4 credits in excess of the quantity of credits needed to
5 comply with subsection (b) may transfer the credits
6 to another electric utility in the same utility holding
7 company system.

8 “(5) DELEGATION OF MARKET FUNCTION.—
9 The Secretary may delegate to an appropriate mar-
10 ket-making entity the administration of a national
11 tradeable renewable energy credit market and a na-
12 tional energy efficiency credit market for purposes of
13 creating a transparent national market for the sale
14 or trade of renewable energy credits and energy effi-
15 ciency credits.

16 “(d) ENFORCEMENT.—

17 “(1) CIVIL PENALTIES.—Any electric utility
18 that fails to meet the requirements of subsection (b)
19 shall be subject to a civil penalty.

20 “(2) AMOUNT OF PENALTY.—The amount of
21 the civil penalty shall be equal to the product ob-
22 tained by multiplying—

23 “(A) the number of kilowatt-hours of elec-
24 tric energy sold to electric consumers in viola-
25 tion of subsection (b); by

1 “(B) 200 percent of the value of the alter-
2 native compliance payment, as adjusted for in-
3 flation under subsection (h).

4 “(3) MITIGATION OR WAIVER.—

5 “(A) PENALTY.—

6 “(i) IN GENERAL.—The Secretary
7 may mitigate or waive a civil penalty under
8 this subsection if the electric utility is un-
9 able to comply with subsection (b) due to
10 a reason outside of the reasonable control
11 of the electric utility.

12 “(ii) AMOUNT.—The Secretary shall
13 reduce the amount of any penalty deter-
14 mined under paragraph (2) by the amount
15 paid by the electric utility to a State for
16 failure to comply with the requirement of
17 a State renewable energy program if the
18 State requirement is greater than the ap-
19 plicable requirement of subsection (b).

20 “(B) REQUIREMENT.—The Secretary may
21 waive the requirements of subsection (b) for a
22 period of up to 5 years with respect to an elec-
23 tric utility if the Secretary determines that the
24 electric utility cannot meet the requirements
25 due to a hurricane, tornado, fire, flood, earth-

1 quake, ice storm, or other natural disaster or
2 act of God beyond the reasonable control of the
3 utility.

4 “(4) PROCEDURE FOR ASSESSING PENALTY.—
5 The Secretary shall assess a civil penalty under this
6 subsection in accordance with the procedures pre-
7 scribed by section 333(d) of the Energy Policy and
8 Conservation Act (42 U.S.C. 6303(d)).

9 “(e) STATE RENEWABLE ENERGY ACCOUNT PRO-
10 GRAM.—

11 “(1) IN GENERAL.—There is established in the
12 Treasury a State renewable energy account program.

13 “(2) DEPOSITS.—All money collected by the
14 Secretary from alternative compliance payments and
15 the assessment of civil penalties under this section
16 shall be deposited into the renewable energy account
17 established pursuant to this subsection.

18 “(3) USE.—Subject to appropriations, proceeds
19 deposited in the State renewable energy account
20 shall be used by the Secretary to carry out a pro-
21 gram to provide grants to the State agency respon-
22 sible for developing State energy conservation plans
23 under section 362 of the Energy Policy and Con-
24 servation Act (42 U.S.C. 6322) for the purposes of
25 promoting renewable energy production, including

1 programs that promote technologies that reduce the
2 use of electricity at customer sites, such as solar
3 water heating.

4 “(4) ADMINISTRATION.—The Secretary may
5 issue guidelines and criteria for grants awarded
6 under this subsection.

7 “(5) RECORDS.—State energy offices receiving
8 grants under this section shall maintain such
9 records and evidence of compliance as the Secretary
10 may require.

11 “(6) PREFERENCE.—In allocating funds under
12 this subsection, the Secretary shall give preference—

13 “(A) to States in regions that have a dis-
14 proportionately small share of economically sus-
15 tainable renewable energy generation capacity;
16 and

17 “(B) to State programs to stimulate or en-
18 hance innovative renewable energy technologies.

19 “(f) EXEMPTIONS.—During any calendar year, this
20 section shall not apply to an electric utility—

21 “(1) that sold less than 4,000,000 megawatt-
22 hours of electric energy to electric consumers during
23 the preceding calendar year; or

24 “(2) in Hawaii.

1 “(g) INFLATION ADJUSTMENT.—Not later than De-
2 cember 31 of each year beginning in 2008, the Secretary
3 shall adjust for inflation the rate of the alternative compli-
4 ance payment under subsection (b)(2)(C).

5 “(h) STATE PROGRAMS.—

6 “(1) IN GENERAL.—Subject to paragraph (2),
7 nothing in this section diminishes any authority of
8 a State or political subdivision of a State to adopt
9 or enforce any law or regulation respecting renew-
10 able energy or energy efficiency, or the regulation of
11 electric utilities,.

12 “(2) COMPLIANCE.—Except as provided in sub-
13 section (d)(3), no such law or regulation shall relieve
14 any person of any requirement otherwise applicable
15 under this section.

16 “(3) COORDINATION.—The Secretary, in con-
17 sultation with States having such renewable energy
18 and energy efficiency programs, shall, to the max-
19 imum extent practicable, facilitate coordination be-
20 tween the Federal program and State programs.

21 “(4) REGULATIONS.—

22 “(A) IN GENERAL.—The Secretary, in con-
23 sultation with States, shall promulgate regula-
24 tions to ensure that an electric utility that is
25 subject to the requirements of this section and

1 is subject to a State renewable energy standard
2 receives renewable energy credits if—

3 “(i) the electric utility complies with
4 the State standard by generating or pur-
5 chasing renewable electric energy or renew-
6 able energy certificates or credits rep-
7 resenting renewable electric energy; or

8 “(ii) the State imposes or allows other
9 mechanisms for achieving the State stand-
10 ard, including the payment of taxes, fees,
11 surcharges, or other financial obligations.

12 “(B) AMOUNT OF CREDITS.—The amount
13 of credits received by an electric utility under
14 this subsection shall equal—

15 “(i) in the case of subparagraph
16 (A)(i), the quantity of renewable energy re-
17 sulting from the generation or purchase by
18 the electric utility of existing renewable en-
19 ergy or new renewable energy; and

20 “(ii) in the case of subparagraph
21 (A)(ii), the pro rata share of the electric
22 utility, based on the contributions to the
23 mechanism made by the electric utility or
24 customers of the electric utility, in the

1 State, of the quantity of renewable energy
2 resulting from those mechanisms.

3 “(C) PROHIBITION ON DOUBLE COUNT-
4 ING.—The regulations promulgated under this
5 paragraph shall ensure that a kilowatt-hour as-
6 sociated with a renewable energy credit issued
7 pursuant to this subsection shall not be used
8 for compliance with this section more than
9 once.

10 “(i) ENERGY EFFICIENCY CREDITS.—

11 “(1) DEFINITIONS.—In this subsection:

12 “(A) CUSTOMER FACILITY SAVINGS.—The
13 term ‘customer facility savings’ means a reduc-
14 tion in end-use electricity at a facility of an
15 end-use consumer of electricity served by an
16 electric utility, as compared to—

17 “(i) consumption at the facility during
18 a base year; or

19 “(ii) in the case of new equipment (re-
20 gardless of whether the new equipment re-
21 places existing equipment at the end of the
22 useful life of the existing equipment), con-
23 sumption by the new equipment of average
24 efficiency.

1 “(B) ELECTRICITY SAVINGS.—The term
2 ‘electricity savings’ means—

3 “(i) customer facility savings of elec-
4 tricity consumption adjusted to reflect any
5 associated increase in fuel consumption at
6 the facility;

7 “(ii) reductions in distribution system
8 losses of electricity achieved by a retail
9 electricity distributor, as compared to
10 losses attributable to new or replacement
11 distribution system equipment of average
12 efficiency (as defined by the Secretary by
13 regulation); and

14 “(iii) the output of new combined heat
15 and power systems, to the extent provided
16 under paragraph (5).

17 “(C) QUALIFIED ELECTRICITY SAVINGS.—
18 The term ‘qualified electricity savings’ means
19 electricity saving that meet the measurement
20 and verification requirements of paragraph (4).

21 “(2) PETITION.—The Governor of a State may
22 petition the Secretary to allow up to 25 percent of
23 the requirements of an electric utility under sub-
24 section (b)(1) in the State to be met by submitting

1 Federal energy efficiency credits issued pursuant to
2 this subsection.

3 “(3) ISSUANCE OF ENERGY EFFICIENCY CRED-
4 ITS.—

5 “(A) IN GENERAL.—The Secretary shall
6 issue energy efficiency credits for States de-
7 scribed in paragraph (2) in accordance with this
8 subsection.

9 “(B) QUALIFIED ELECTRICITY SAVINGS.—
10 In accordance with regulations promulgated by
11 the Secretary, the Secretary shall issue credits
12 for—

13 “(i) qualified electricity savings
14 achieved by an electric utility in a calendar
15 year; and

16 “(ii) qualified electricity savings
17 achieved by other entities (including State
18 agencies) if—

19 “(I) the measures used to achieve
20 the qualified electricity savings were
21 installed or place in operation by the
22 entity seeking the credit; and

23 “(II) no electric utility paid a
24 substantial portion of the cost of
25 achieving the qualified electricity sav-

1 ings (unless the utility has waived any
2 entitlement to the credit).

3 “(4) MEASUREMENT AND VERIFICATION OF
4 ELECTRICITY SAVINGS.—Not later than January
5 2010, the Secretary shall promulgate regulations re-
6 garding the measurement and verification of elec-
7 tricity savings under this subsection, including regu-
8 lations covering—

9 “(A) procedures and standards for defining
10 and measuring electricity savings that will be
11 eligible to receive credits under paragraph (3),
12 which shall—

13 “(i) specify the types of energy effi-
14 ciency and energy conservation that will be
15 eligible for the credits;

16 “(ii) require that energy consumption
17 for customer facilities or portions of facili-
18 ties in the applicable base and current
19 years be adjusted, as appropriate, to ac-
20 count for changes in weather, level of pro-
21 duction, and building area;

22 “(iii) account for the useful life of
23 electricity savings measures;

1 “(iv) include specified electricity sav-
2 ings values for specific, commonly-used ef-
3 ficiency measures; and

4 “(v) exclude electricity savings that—
5 “(I) are not properly attributable
6 to measures carried out by the entity
7 seeking the credit; or

8 “(II) have already been credited
9 under this section to another entity;

10 “(B) procedures and standards for third-
11 party verification of reported electricity savings;
12 and

13 “(C) such requirements for information,
14 reports, and access to facilities as may be nec-
15 essary to carry out this subsection.

16 “(5) COMBINED HEAT AND POWER.—Under
17 regulations promulgated by the Secretary, the incre-
18 ment of electricity output of a new combined heat
19 and power system that is attributable to the higher
20 efficiency of the combined system (as compared to
21 the efficiency of separate production of the electric
22 and thermal outputs), shall be considered electricity
23 savings under this subsection.

24 “(j) RECONSIDERATION.—

25 “(1) REVIEW.—

1 “(A) IN GENERAL.—Not later than Janu-
2 ary 15, 2017, and every 5 years thereafter, the
3 Secretary shall review and make recommenda-
4 tions to Congress on the program established
5 under this section.

6 “(B) ANALYSIS.—The review shall analyze
7 whether—

8 “(i) the program established under
9 this section has contributed to an economi-
10 cally harmful increase in electricity rates in
11 regions of the United States;

12 “(ii) the program has resulted in net
13 economic benefits for the United States;
14 and

15 “(iii) new technologies and clean, re-
16 newable energy sources will advance the
17 purposes of this section.

18 “(2) RECOMMENDATIONS.—The Secretary shall
19 submit to Congress recommendations on whether—

20 “(A) the percentage of energy efficiency
21 credits eligible to be submitted under subsection
22 (b)(1) should be increased or decreased;

23 “(B) the percentage of renewable elec-
24 tricity required under subsection (b)(1) should
25 be increased or decreased; and

1 “(C) the definition of ‘new renewable en-
2 ergy’ should be expanded to reflect advances in
3 technology or previously unavailable sources of
4 clean or renewable energy.

5 “(3) REPORT.—Not later than January 15,
6 2017, the Secretary shall submit to Congress a re-
7 port that describes any recommendations of the Sec-
8 retary on changes to the program established under
9 this section.

10 “(k) REGULATIONS.—Not later than 1 year after the
11 date of enactment of this section, the Secretary shall pro-
12 mulgate regulations implementing this section.

13 “(l) TERMINATION OF AUTHORITY.—This section
14 and the authority provided by this section terminate on
15 December 31, 2039.”.

16 (b) TABLE OF CONTENTS AMENDMENT.—The table
17 of contents of the Public Utility Regulatory Policies Act
18 of 1978 (16 U.S.C. prec. 2601) is amended by adding at
19 the end of the items relating to title VI the following:

 “Sec. 610. Federal renewable portfolio standard.”.